

Should I Buy This When I Have So Much?
Reflection On Personal Possessions As An Anti-Consumption Strategy

Utpal Dholakia, Jihye Jung, and Nivriti Chowdhry
Rice University

April 2018

* Utpal M. Dholakia (dholaakia@rice.edu) is the George R. Brown Professor of Marketing, and Jihye Jung (jihye.jung@rice.edu) and Nivriti Chowdhry (nivi@rice.edu) are doctoral students at the Jones Graduate School of Business, Rice University, 6100 Main Street MS-531, Houston TX-77005 The authors would like to thank the Jones Graduate School of Business, Rice University for financial support in conducting this research.

Should I Buy This When I Have So Much?

Reflection On Personal Possessions As An Anti-Consumption Strategy

Abstract

Despite having ample possessions, many Western consumers continue to buy new things. Our central proposition in this research is that one approach to resist shopping temptations and stifle buying urges is to get consumers to reflect on, and evoke momentary desire for, recently used belongings. We contribute to the anti-consumption literature by theorizing that the desire to consume, like willpower, may function as a limited motivational resource, becoming depleted upon reflecting about favored personal possessions, leaving less desire for subsequent shopping urges. Across four studies, consumers who reflected on their recently used personal belongings experienced less desire for an unexpectedly encountered product, were less likely to buy impulsively and expressed a lower willingness-to-pay for new products. This research broadens the scope of anti-consumption theory. In addition to rejection, restriction, and reclaim, reflection is proposed as a fourth strategy for individuals to regulate purchasing activities. Reflection provides a practical intervention for policymakers, consumer advocates, and consumers to consume prudently.

Keywords: Anti-Consumption; Policy Intervention; Reflection; Impulsive Shopping, Prudent Consumption.

“When you are discontent, you always want more, more, more. Your desire can never be satisfied. But when you practice contentment, you can say to yourself, ‘Oh yes - I already have everything that I really need.’” – The Dalai Lama, quoted in “Oprah Talks to the Dalai Lama,” O, The Oprah Magazine, oprah.com, August 2001.

“Wilful waste makes woeful want.” – Mrs. Gaskell, *Wives and Daughters*, 1866.

During the Great Depression of the 1930s and the Second World War, the aphorism “*Use it up, wear it out, make it do, or do without*,” was widely quoted and popularized. However, it would find little resonance among many of today’s consumers. A defining characteristic of contemporary culture is rampant consumerism, manifesting in the frequent acquisition of new goods, and less attention on savoring or using up what one already has. By a global standard, most Western consumers have ample possessions (Menzel and Mann 1994), yet they spend significant time, effort, and money in buying new things (Cherrier 2009; Montoya and Scott 2013; Robin, Dominguez and Tilford 2008). Underlying such acquisition is the expectation that acquiring new things will bring about a transformation of one’s life, improving it in some significant way (Richins 2011). However, the transformation often fails to materialize after purchase, leading many consumers to experience an emotional low and continue with the acquisition of material goods (Richins 2013).

Against the backdrop of rampant, acquisitive consumerism and its attendant negative consequences for individuals and the society (Cherrier and Murray 2002), anti-consumption research posits that consumers must take a stand and resist consumption by focusing on reasons against it (Chatzikadis and Lee 2012; Lee, Fernandez and Hyman 2009; Yuksel 2013). This research classifies anti-consumption approaches as falling into one of three broad strategies: reject, restrict, and reclaim (Black and Cherrier 2010; Lee, Roux, Cherrier and Cova 2011). The rejection strategy focuses on excluding particular goods and services from consideration (e.g., boycotting a particular brand or product category), restriction emphasizes methods to limit or

regulate consumption (e.g., undertake an intermittent fast, or refrain from shopping for new items), and reclaim focuses on finding new and creative uses for products and reducing waste through recycling, dumpster diving, and so on. In the enactment of each strategy, the individual consciously articulates a clear set of reasons against consumption.

Despite its obvious importance and value to consumer culture, current thinking about anti-consumption has two limitations that we seek to address with the present research. First, even though anti-consumption practices grounded in rejection, restriction, and reclaim, such as consumer boycotts, minimalism, and voluntary simplicity have grown steadily they are still employed by relatively few consumers. As such, anti-consumption practices remain outside mainstream consumer behavior (Chatzidakis and Lee 2012).

Second, and perhaps more importantly, the extant anti-consumption literature, for the most part, says little about how mainstream consumers can and should transition from their current materialistic and acquisition-fueled lifestyles to become active anti-consumers (Cherrier 2009; Cherrier 2010; Cherrier and Murray 2007). Specifically, what should they do with their belongings? And how should they change their participation in the throwaway consumer culture and shopping-focused lifestyle to one that is more aligned with the tenets of anti-consumption? To appreciate the size and scope of this issue, statistics from one particular consumption domain, the purchases of clothing and shoes, are worth considering.

One recent survey found that on average, American consumers have ninety items of clothing in their wardrobes, but use fewer than half of them. Most consumers have clothes they have never worn, many with intact original price tags (Iyer 2013). Yet despite having closets full of clothes, during the mid-2000s, consumers continued to add an average of twenty two garments to their already swollen wardrobes annually (Leonard 2011) Furthermore, mainstream consumers

throw away more than 15% of their still-usable, perfectly good clothes each year, most of which go to landfills (Cline 2014).

Another survey of American women found that they own an average of seventeen pairs of shoes, but only wear three regularly (Shopsmart 2011). Stoked by marketer-generated occasions such as Black Friday, Valentine's Day, and back to school season, along with marketing messages promoting sales, deals, and limited-time offers, consumers continue to buy new items, often on impulse and without any advance planning, at rates that greatly exceed the rates at which their possessions wear out. Furthermore, such consumption is often driven by social pressure to wear the latest fashions, an individual desire for newness, and cultural norms that encourage constant novelty.

Simply put, mainstream consumers have lifestyles that are too far removed from anti-consumption principles. They have numerous reasons, whether self-generated or marketer-provided, for buying, and few reasons or strategies against buying.

What is more, as anti-consumption researchers have noted (e.g., Cherrier and Murray 2002; Dobscha 1998), impulsive, acquisitive consumerism comes with high costs. In addition to abusive labor practices and environmental degradation (Leonard 2011; Micheletti 2003), many social problems such as perilously low personal savings rates (Adams and Rau 2011), high rates of indebtedness and bankruptcies (Soll, Keeney and Larrick 2013), the prevalence of addictive buying tendencies (Koran, Faber and Aboujaoude 2006), financial anxiety (Montoya and Scott 2013), and hoarding behaviors (Cherrier 2010; Steketee and Frost 2003) all attest to the significance and seriousness of this issue, and to the improbability of mainstream consumers embracing anti-consumption ideals or practices without support or interventions.

For anti-consumption to become widely appealing and adopted, it has to offer a pathway

to mainstream consumers to move away from their current acquisitive lifestyles (Dobscha 1998). As Cherrier and Murray (2007) point out, consumers need help and support in gradually dismantling their consumption-focused lifestyles and constructing new ones built around values other than consumption. Specifically, practical methods for weaning them away from constant impulsive buying, and for appreciating and enjoying their current store of belongings are needed as the “middle way” (taking inspiration from the Buddhist idea of moderation) on the route towards embracing more involved and active forms of anti-consumption. Consequently, for public policy makers, anti-consumption proponents, consumer advocates, and for consumers themselves, there is an urgent need to design and implement effective and feasible interventional approaches to reduce shopping and increase reflection about, and appreciation for, already owned possessions (Burroughs et al. 2013; Lee and Ahn 2016; Richins 2011).

Theoretical Framework and Research Hypotheses

This is the goal of the present research. After acknowledging the importance of the anti-consumption movement and pointing out its current limitations in appealing to mainstream consumers, we propose expanding the strategies of anti-consumption while staying true to its core values. In this paper, we consider whether more consumers can be brought into the fold of the anti-consumption movement by using reflection as a means to regulate and reduce unplanned shopping activity, that has so many potentially negative consequences for consumers, through a straightforward, practically applicable, and instruction-based intervention on a when-needed basis. Specifically, we propose and test one method of reducing shopping urges and buying activity: *evoking the individual's consumption desire by reflecting on the recent use of their personal possessions*. With this research, we also strive to broaden the scope of anti-consumption research, and provide a useful, versatile, and practical tool to public policy makers.

Prior research has shown that the ways in which products are used and enjoyed post-purchase have significant ramifications for consumer well-being (Holbrook and Hirschman 1982; Lee and Ahn 2016; Richins 2013) and more specifically, on their financial health (Robin et al. 2008). Consumer desire plays an important role in every stage of the consumer's involvement with the product, from the outset when the product is first recognized as useful, through the process of its selection and purchase, then followed by its adoption, use, and eventually its disposition (Dholakia 2015). In fact, we may even go so far as to say that acquisitive consumer desire represents one of the biggest hurdles for consumer acceptance of the tenets of anti-consumption. Despite its importance, relatively little research, to our knowledge, has studied consumers' desire to *use products they own* or considered the effect evoking such desire has on subsequent consumer decisions (e.g. Belk 2010; Gould 1991).

In contrast, the desire to *purchase new products* is an extensively studied topic in consumer research, with researchers focusing on numerous factors that influence the intensity of this desire such as the product's physical proximity, various sensory inputs, societal and cultural trends, and group influences (Belk, Ger and Askegaard 2003; Dholakia 2015; Faber and Vohs 2004). For unplanned shopping, in particular, the intensity of desire for the product directly affects the consumer's likelihood of impulsive purchase (Dholakia, Gopinath and Bagozzi 2005; Rook and Fisher 1995; Vohs and Faber 2007). The emphasis on studying motivational drivers of impulsive purchase is consistent with marketers' interest in stimulating such buying behaviors; however it is counterproductive to individuals and organizations such as anti-consumption movement members, public policy makers, and consumer advocates who wish to increase consumer welfare by curbing shopping. Our research seeks to redress this disparity in knowledge by studying the potential link between the desire to use one's existing possessions and the desire

to purchase new items.

In this research, our central thesis is that reflecting on the recent use of one's personal possessions through a structured thought listing-based intervention will arouse the individual's consumption-related desire. As a result of this arousal, we argue that consumption desire will be used up and depleted, leaving less of it available in a subsequent task, through a process that we theorize as being analogous to the depletion of self-control. This in turn, will lessen the consumer's interest in buying when a subsequent task provides such an opportunity. Our hypothesis is based on the widely-accepted principle among psychologists that desire plays a significant and nuanced role in regulating behavior.

Consumer self-control is often conceptualized as a struggle between willpower and desire (Hoch and Loewenstein 1991; Montoya and Scott 2013; Siemens and Kopp 2011). By studying the processes and means of self-control, past research has mostly focused on the willpower side of the motivational drivers of behavior (e.g. Carver and Scheier 2001; Koenigstorfer, Groeppel-Klein and Kamm 2014). In particular, the prominent *strength model of self-control* posits that engaging in a self-regulation act depletes this resource; in the ego-depleted state, further attempts at self-control impair performance (Baumeister, Vohs and Tice 2007; Hofmann, Vohs and Baumeister 2012). A large body of studies have empirically tested and supported the strength model (e.g., Koenigstorfer et al. 2014; Montoya and Scott 2013).

Only recently have researchers begun to scrutinize the forces of desire that need to be controlled in the first place. This research posits that the role of desire in self-control may be just as important as the relatively well-understood role of restraint (e.g. Dholakia 2015; Myrseth, Fishbach and Trope 2009; Redden and Haws 2013). Drawing upon motivational theories of behavior, and in particular, the strength model of self-control, as well as consumer research on

satiation and sequential decision making, we theorize that like willpower (Baumeister et al. 2007) and sexual desire (e.g. Pfaus 2009; Zuckerman, 1971), a person's consumption desire may also function as a limited motivational resource, and get depleted when it is experienced.

Consequently, thinking about a recently used personal possession will generate momentary desire for the possession, and less of it will be available for subsequent consumption-related tasks, a process that is particularly relevant when individuals make a series of shopping decisions.

There are at least two distinct streams of existing research that provide the theoretical backbone for our hypothesis and the potential success of our proposed intervention for curbing impulsive buying: (1) the role of cognitive processes on satiation and its effects on consumer decision making, and (2) the role of desire in self-regulatory behavior. Research on sequential decision making by consumers within both these research lines is also relevant.

How Thinking Affects Satiation

In consumer research, satiation is defined as a decline in the consumer's enjoyment, and a reduced desire for continued consumption, that follows repeated acts of consumption (Coombs and Avrunin 1977; McAlister 1982; Redden 2008; Redden 2015). Satiation has been extensively studied by marketing scholars in the context of consumption. For instance, understanding the onset, occurrence, and role of satiation in eating behaviors is considered as crucial for designing effective policy interventions for healthy food consumption (Burton and Kees 2012). At its heart, satiation relies on the idea that a consumer's current choice is dependent on previous choices. As the consumer derives utility from consuming a particular attribute (e.g., a sweet food), their further utility for the same attribute diminishes (McAlister 1982). A robust finding in studies on satiation is that frequent or repeated exposure to a particular item produces stimulus satiation or monotony, lowering subsequent desire for the item (Hetherington, Pirie and Nabb 2002).

Relatedly, when individuals reflect on past consumption of a particular item, they feel satiated feeling that they have consumed the same item over and over (Redden 2015). While not explicitly articulated as such, satiation plays a key role in encouraging anti-consumption. For instance, one core motivation for joining the Voluntary Simplicity movement is satiation with conventional acquisition and consumption modes (Cherrier and Murray 2007; Huneke 2005).

A large number of studies support the role of thinking in satiation. Wansink (2004) provides an extensive review of environmental factors such as package size, plate shape, and socializing while eating that encourages people to keep eating, arguing that lowered monitoring and attention to one's eating activity is the common mechanism through which these disparate factors work to delay satiation. More recent research has demonstrated occurrence of "healthy satiation" which is the phenomenon that after eating unhealthy but tasty foods like candy, consumers who are high in trait self-control experience reduced desire for consuming more candies (Redden and Haws 2013). However, consumers who are low in self-control do not experience a similar drop in desire. These differences occur not just because of differences in motivation but also because the former group pays more attention to the amount they are consuming whereas the latter group does not do so, suggesting that the drop in desire is at least partly based on being aware of and thinking about prior consumption.

Further supporting the role of thinking in the depletion of desire for an item, research shows that even vividly imagining eating a tasty food repeatedly during an experimental session is enough to lower actual consumption of the food. This effect is attributed to reduced desire for the repeatedly imagined food, rather than considering it to be less palatable or tasty (Morewedge, Huh and Vosgerau 2010). Finally, simply making past consumption feel more recent can induce satiation and result in lower desire to eat (Galak et al. 2014). In this research, the authors simply

manipulated perceptions of how much time had passed since the study participant's previous meal, and found that this manipulation influenced both how much consumers enjoyed the experience of eating and the volume of food they actually ate. Recently, in developing a taxonomy of satiation, Redden (2015) suggested that satiation has a distinct reflective component such that it is momentarily constructed based on judgments and cognitions about the past consumption of the same or similar item.

The satiation studies discussed here are all consistent with the idea we advance here, which is that when desire for an item is experienced through reflection, it contributes to the individual's satiation, arousing less subsequent consumption desire for a new item. Particularly relevant to the current research, physiological mechanisms such as actual eating and digestion are not necessary for satiation to occur; it is simply enough to think about the stimulus in question (Redden 2015). However, unlike extant satiation research, which is stimulus specific and focuses on the effects of a particular item on subsequent desire for the same item, our interest is in studying the effects of reflection on the recent use of a possession on the individual's purchase desire for an encountered product regardless of whether it is related or not related to the possession.

The Role of Desire in Regulating Behavior

In the extensive literature on consumer self-control, desire is conceptualized as the countervailing motivational force to self-control. The influential strength model of self-control (Baumeister 2002; Baumeister, Vohs and Tice 2007) posits that engaging in every act of self-regulation consumes this limited resource and depletes it; while in this ego-depleted state, further self-control attempts in any domain (not just the depleting domain) impair the individual's performance that require self-regulatory behavior. Thus consumers exhibit a gradual

deterioration when engaging in consecutive acts of self-control. Dozens of studies, many in consumer settings with significant public policy implications, have empirically tested and supported the strength model.

A growing body of recent research shows that desire plays a significant, distinct, and nuanced role in the self-regulation process and in determining the outcome of the motivational drivers of behavior (see Dholakia 2015 for a recent review). These findings have expanded the strength model of self-control by explicitly considering the role of desire in repeated self-regulation with significant implications for consumer decisions. One such expansion is the “process model of ego depletion” (Inzlicht and Schmeichel 2012) which posits that in addition to depleting self-control, acts of self-regulation also independently increase an individual’s approach motivation (that is the capacity to experience desire) in subsequent tasks. In one study, Schmeichel, Harmon-Jones, and Harmon-Jones (2010) found that when participants had exercised self-control in an initial activity by inhibiting their common writing tendencies, they were then likely to engage in more low-stakes betting behavior in a subsequent unrelated task. This finding is germane to the present research because it directly supports our theorizing that much like self-control, desire functions as a flexible resource available to the individual with a certain capacity that changes with the individual’s thoughts and actions.

There is also available evidence that desire experienced for one thing is, at least temporarily, limited, and can be substituted with desire for another thing. As one example of this phenomenon, Hoch and Loewenstein (1991) suggested that a person can temporarily suppress a desire for one item by giving himself or herself a small but immediate reward of another sort. Thus a dieter may quell his strong urge for a particular unhealthy food item with a substitute that is a healthier (but still tasty) food item (Adriaanse, de Ritter and de Wit 2009; Liu et al. 2015).

Adriaanse, de Ritter and de Wit (2009) showed that when consumers who normally eat unhealthy snacks are encouraged to form an implementation plan to switch to healthier options that includes specifying motivational cues about why such a change is warranted, they decrease their unhealthy snack consumption significantly. Liu and colleagues (2015) used the concept of substitution to develop an intervention they called “virtue-vice bundles” that allows consumers to judiciously manage their food choices between healthy and unhealthy options.

Furthermore, research on the “sequential mitigation effect” has examined consecutive decisions of consumers in different product categories during a single shopping trip, finding that decision makers experienced less desire for a product when they had participated in a prior, impulsive choice compared to when they did not do so (Dholakia et al. 2005). In one study, participants’ desire for and likelihood of picking up a gourmet sandwich was substantially lower if they had been given an opportunity to impulsively choose a sweater beforehand. Importantly, it was not necessary for them to actually choose to buy the sweater, simply participating in the task (and presumably evoking desire) was enough. This idea is further supported by research examining sequential choices of consumers in shopping decisions which finds that when consumers make larger tradeoffs between different alternatives available to them in an earlier choice task, their subsequent choices show effects of depletion (Wang et al. 2010).

Finally, research on balancing effects (Dhar and Simonson 1999) shows that when consumers frame the decision as a tradeoff between two goals (for example, pleasure vs. health) they tend to balance choices across sequential decisions made consecutively so that if a tasty item is chosen the first time, a healthy item is picked next. In the context of food, consumers choose a combination of virtue and vice foods to achieve a “taste-health balance point” in which lower proportions of vice foods are often preferred to higher proportions (Liu et al. 2015). While

not directly addressing the consumer's motivation, the notion of balancing across sequential decisions is consistent with the idea that if desire is evoked in a first decision, it will play less of a role in a consecutive decision. Based on this discussion, our hypotheses are:

Hypothesis 1: Recalling recent use of a personal possession through reflection will produce greater momentary desire when compared to a control group or planning to use an unused possession.

Hypothesis 2: Recalling recent use of a personal possession through reflection will lower the consumer's subsequent willingness-to-pay for new products when compared to a control group or planning to use an unused possession.

The Moderating Role of Type of Recalled Possession

Given our focus on designing and testing an effective instruction-based intervention to reduce shopping, we also wanted to understand potential boundary conditions for hypotheses 1 and 2. We chose to examine the moderating role played by the type of recalled personal possession, specifically whether it is hedonic or utilitarian, in producing the hypothesized reduced shopping effect. The distinction between hedonic and utilitarian goods is central to anti-consumption research. In developing theory, anti-consumption scholars have commonly distinguished between hedonic possessions that are used by consumers for sensual pleasure, fantasy, and fun, and are often discretionary purchases and utilitarian possessions, which are used mainly for functional reasons and are usually necessities (Holbrook and Hirschman 1982; Huneke 2005; see also Kronrod and Danziger 2013). Rejecting consumption of functional products is more difficult, and sometimes even impossible. On the other hand, hedonic possessions can be given up, given away, or substituted relatively easily (Brosius, Fernandez and Cherrier 2013). In addition to its centrality to anti-consumption research, we also chose the

product type variable because of its usefulness in designing effective public policy interventions. As one example of this usefulness, Richins (2011) demonstrated the importance of hedonic transformation expectations (e.g., “I would have more fun” and “I’d enjoy life more”) in mediating the negative effects of materialism on detrimental consumer behaviors such as overusing credit and falling in debt.

Consistent with Richins (2011), we hypothesize that when individuals reflect on their recent use of a hedonic possession, instead of “using up” consumption desire, the task will have an arousing effect and stimulate greater desire in a subsequent shopping decision, but only when this decision involves other hedonic products. This prediction is based on prior research showing that utilitarian possessions are evaluated through the perspective of whether the item satisfied its purpose whereas hedonic possessions are judged based on their ability to produce positive emotions such as delight and excitement (Babin, Darden and Griffin 1994). While satisfaction promotes satiation, experiencing an arousing emotion increases indulgence in behaviors sustaining that emotion (Chitturi, Raghunathan and Mahajan 2008). Research on reverse alliesthesia also shows that sampling a consumption cue that is high in incentive value enhances subsequent seeking out and consumption of any rewarding cue (Wadhwa, Shiv and Nowlis 2008). This difference implies that desire produced by thinking about a utilitarian personal possession will deplete the motivational resource of desire and reduce the person’s shopping. In contrast, desire produced from reflecting about a hedonic personal possession will reverse this effect, leading to greater desire in a subsequent hedonic shopping decision. Thus, our hypothesis is:

Hypothesis 3: Recalling recent use of a hedonic (vs. utilitarian) personal possession through reflection will increase the consumer’s interest in buying new hedonic products, but not in buying utilitarian products.

Overview of Studies

We tested these hypotheses through a series of four studies. To examine effects of recalling the recent use of a personal possession, Study 1 examined its impact on consumers' subsequent willingness-to-pay for a basket of new products, and Study 2 tested whether their desire for, and likelihood of, purchasing an item impulsively would be affected. Study 3 investigated the moderating role of hedonic vs. utilitarian possessions in producing consumption desire depletion. Study 4 ruled out an alternative explanation for the moderating role of type of possession. The findings of these studies show that reflection about the recent use of one's possessions provides an effective method to quell the shopping urge, and to reduce consumption.

Study 1

In this study, the treatment condition involves our proposed instruction-based intervention: reflecting, and then writing, about a recent use experience of a personal possession. For comparison, we included two other conditions. One was a condition in which participants engaged in a similar thinking and writing task but it was for making a plan to use a possession they had not used recently. Our reasoning was that the former task would produce more consumption-related desire than the latter task because people often lose interest for items they own and stop using (Leonard 2011), in accordance with hypothesis 1. Consequently, less desire would be available for a subsequent consumption decision, leading to lowered willingness to pay for new items in the former case. The other condition was a “true control” in which participants did not perform any prior thought-elicitation task so that we could assess the effects of evoking desire in both conditions to a true control condition where no desire was evoked at all.

Method

One hundred sixty-five US-based fully employed participants (average age = 37 years,

$SD = 10.6$, 48.5% female) were recruited through Amazon Mechanical Turk (AMT). Research has shown that AMT is more representative of the general population than traditional convenience samples (Buhrmester, Kwang and Gosling 2011) and is reliable for experimental research (Goodman, Cryder and Cheema 2013). Participants were randomly assigned to one of three experimental conditions: Recently Used, Recently Unused, and Control. Those in the ‘Recently Used’ condition were asked to think about and describe a personal possession that they currently owned and had used recently, after which they described its most recent use in detail, explaining when, where, how, and for how long they had used it. In the ‘Recently Unused’ condition, participants were asked to think about and briefly describe a possession they currently owned but had not used recently. Next, they were asked to form a detailed plan to use it in the near future by explaining when, where, how, and for how long they would use the possession. Note that in this study, we did not impose any restriction in our instructions regarding the type of item they could use for this task. Examples of items that participants chose included outfits, shoes, fashion accessories, and various electronic items such as laptops, smartphones, and digital reading devices like the Kindle.

After completing this task, participants in both conditions indicated the level of desire they experienced for the possession at the moment with a 7-point scale anchored with 1 = “no desire at all”, 4 = “moderate desire” and 7 = “very strong desire.” In the control condition, participants moved to the second stage of the study directly.

In the study’s second stage, participants were shown a series of five products: a cashmere sweater, a stainless steel watch, a coffee maker, a chair, and a box of Godiva chocolates. In each case, participants indicated their estimate of the product’s actual price, and then provided their willingness to pay (WTP) for it. Finally, participants provided their demographic characteristics

(gender, age, amount of annual household income, and education attained).

Results

Respondents' descriptions of possession use (past or prospective) in the recently used and recently unused conditions varied considerably in length ($M = 62.0$ words, $SD = 25.8$). After reviewing the descriptions, some of them did not have sufficient detail. To preserve the experimental manipulation's integrity, we excluded participants who had written plans that were less than 35 words in length (corresponding to approximately two sentences of medium length). A total of 8 respondents were excluded because of this criterion. We note that all the reported results remain substantively the same whether this restriction is enforced or not¹.

Level of experienced desire. Results of an ANCOVA revealed that after controlling for respondents' demographics (gender, age, income, and education), those recalling recent use of a possession ($M_{Recently\ Used} = 5.56$, $SE = .26$, 95% CI[5.04, 6.08]) indicated significantly higher momentary desire for the item than those who planned use of a recently unused possession ($M_{Recently\ Unused} = 4.38$, $SE = .24$, 95% CI[3.90, 4.86]), $F(1,87) = 10.78$, $p = .001$, $\eta^2 = .110$, $b = 1.19$, 95% CI[.47, 1.90]². As expected, participants experienced greater desire when thinking about a recently used possession than about a recently unused possession. This finding is consistent with, and supports, H1.

Willingness to pay for new products. In the study instructions, we did not provide reference prices for any of the five products. Consequently, for the willingness to pay (WTP) and perceived actual price of the product provided by respondents, we flagged values that were more

¹ The same restriction (a minimum of two sentences, i.e., at least 35 words) is applied for the reported results of all studies in the paper with this experimental manipulation.

² In all results reported in this paper, respondents' demographics, specifically, their gender, age, income, and education are controlled for because these variables could potentially impact both experience of desire and decision making outcomes (cf. Koran et al. 2006). We also replicated each reported analysis without including the demographic variables and the results remain the same. These "without demographic controls" results are not reported in the paper to avoid repetition.

than three standard deviations away from the mean as outliers and removed them from the analysis. Using this approach, the average number of outliers removed in the case of each product was 3.9 and the maximum was 10.

Next, we standardized each product's actual price and WTP. For each respondent, we averaged the standardized values to compute two scores, an index of actual prices and an index of WTPs. The WTP index was subjected to an ANCOVA with demographics and actual price index as covariates. Results revealed a significant main effect of condition ($F(2,143) = 3.59, p = .030, \eta^2 = .048$). Consistent with our prediction, the recently used group indicated the lowest WTP ($M_{\text{Recently_Used}} = -.20, SE = .09, 95\% \text{ CI}[-.37, -.02]$), and it was significantly lower than either the recently unused group ($M_{\text{Recently_Unused}} = .04, SE = .08, 95\% \text{ CI}[-.12, .20]$) or the control group ($M_{\text{Control}} = .11, SE = .08, 95\% \text{ CI}[-.04, .26]$). Thus, recalling recent use of a personal possession lowers participants' subsequent interest in buying new products as measured by their willingness-to-pay for these items, consistent with H2.

Discussion

These results provide support for H1 and H2, and our proposed intervention to reduce shopping behavior. Consistent with our hypothesis, this study showed that participants who were instructed to recall and write about their recent use of a personal possession experienced greater momentary desire for it and subsequently indicated lower willingness-to-pay for a basket of new products when compared to those who formulated a plan to use a possession they had not used recently or a control group. In the next study, we sought to delineate the link between desire evoked from thinking about a possession and subsequently desire and impulsive purchase likelihood for an unexpectedly encountered new product more directly.

Study 2

Study 2 was designed to offer a more direct examination of hypotheses 1 and 2, that by being evoked through thinking about a recently used personal possession, the individual's consumption desire will be depleted and therefore evoked to a lesser degree in a subsequent shopping task involving impulsive choice of an unexpectedly encountered product. To do this, we measured desire experienced for the unexpectedly encountered product in the second task.

In this study, after the same experimental manipulation as Study 1, we asked participants their desire for impulsively purchasing a new product (jacket or headphones) and the likelihood of purchasing it. We hypothesized that respondents who had experienced greater desire from recalling their recent use of a possession would therefore experience relatively lesser desire for the new item and thus would be less likely to purchase it impulsively when compared to those who made a plan to use a personal possession they had not used recently or to a control group.

Method

Two hundred ninety nine participants (38.8% female) were recruited from AMT. The study had a three group (Recently Used vs. Recently Unused vs. Control) between subjects design. The manipulation for the 'Recent Used' and 'Recently Unused' conditions was identical to Study 1 and the control group moved directly to the second phase of the study. In the second phase, participants were randomly assigned to one of two impulsive purchase scenarios (jacket or headphones):

Jacket scenario:

"Imagine that you have gone to the mall to buy a few pairs of socks. As you are walking through the mall, your eyes fall upon a fashionable and attractive jacket. It happens to be in your size and favorite color. The salesperson tells you that the piece on display is the last one left, and they are unlikely to get more of the jacket in this particular style in the

future.”

Headphones scenario: “Imagine that you have gone to a website to buy a music CD. As you are surfing through the website, you come across a sale for a newly introduced set of headphones, which you do not currently own. The headphone set has a lot of useful features such as Bluetooth compatibility, built-in microphone, and a one year warranty. The quantity information shows that only one piece is available in stock for the promotional price, and there is unlikely to be another sale for this particular headphone set in the near future.”

These scenarios are adapted from those used in previous research (Haws, Bearden and Nenkov 2012; Rook and Fisher 1995). We used these two different scenarios to ensure that our results were not scenario-specific. Participants were asked to indicate their level of desire to purchase the product on a 7-point scale anchored with 1 = “no desire at all”, 4 = “moderate desire” and 7 = “very strong desire.” Next, participants were asked to indicate the likelihood that they would actually purchase the jacket or headphones using a percentage sliding scale bounded by 0% and 100%. Finally, participants completed the impulsive buying scale (Rook and Fisher 1995) and provided their demographic information.

Results

Desire experienced in first task. Consistent with Study 1, after controlling for respondents’ demographics (gender, age, income, and education), participants who had recalled their recent use of a possession ($M_{\text{Recently Used}} = 5.20, SE = .16$) indicated greater momentary desire to use the possession when compared to those who made a plan to use a recently unused possession ($M_{\text{Recently Unused}} = 4.47, SE = .17, F(1,159)=9.86, p <.002$), supporting H1.

Desire experienced in second task. Recall that each participant completed only one of

the two impulsive choice scenarios: jacket or headphones. We combined responses for the two products (jacket and headphones) in the second task for analysis. Because ample prior research shows that an important determinant of impulsive choice is the respondent's trait impulsivity (Rook and Fisher 1995; Youn and Faber 2000), we included this variable as a control variable in the analysis.

Respondents' desire for impulsive product choice was subjected to a three group (Recently Used vs. Recently Unused vs. Control) ANCOVA, with demographics and trait impulsivity as covariates. Results revealed that after controlling for demographics and the respondent's trait impulsivity, there was a statistically significant main effect of group ($F(2,271) = 7.10, p < .001, \eta^2 = .050$). As hypothesized, participants who recalled using a personal possession recently ($M_{\text{Recently_Used}} = 3.87, SE = .17, 95\% \text{ CI}[3.53, 4.21]$) expressed significantly lower desire for the jacket or headphones compared to control group ($M_{\text{Control}} = 4.65, SE = .15, 95\% \text{ CI}[4.35, 4.94]$). Interestingly, those in the recently unused condition ($M_{\text{Recently_Unused}} = 3.97, SE = .18, 95\% \text{ CI}[3.62, 4.32]$) also had lower desire for the product than the control group. To the extent that the task of planning produced desire, this result is consistent with our theorizing that evoking desire for a possession reduces desire for, and therefore interest in buying a new product, and supports H2.

Purchase likelihood of jacket or headphones. Participants' purchase likelihood in the impulsive choice task was submitted to a three group (Recent Used vs. Recently Unused vs. Control) ANCOVA, including demographics and trait impulsivity as covariates. Result showed that there was a statistically significant main effect of condition ($F(2,271) = 5.54, p = .004, \eta^2 = .039$). Consistent with previous results, participants in both recently used ($M_{\text{Recently_Used}} = 35.83, SE = 2.95, 95\% \text{ CI}[30.02, 41.65]$) and recently unused ($M_{\text{Recently_Unused}} = 39.37, SE = 3.03, 95\%$

CI[33.40, 45.35]) conditions indicated a significantly lower likelihood of purchasing impulsively compared to the control group ($M_{\text{Control}} = 48.28$, $SE = 2.55$, 95% CI[43.27, 53.30]), providing further support to H2.

Discussion

The results of Study 2 support our theorizing and the first two hypotheses, by garnering consistent support for the effectiveness of our proposed instruction-based intervention to reduce shopping. They reveal that by evoking desire by recalling recent use of a personal possession (a task that evoked greater desire), participants experienced less desire in a subsequent choice task and were less likely to buy the product offered to them when compared to a control group.

Study 3

In Study 3, we sought to test hypothesis 3, which stated that the type of recalled possession (hedonic vs. utilitarian) in the first reflection task will moderate the effect of desire evoked for a possession on desire for a new hedonic product, but not for a new utilitarian product. Specifically, we expected that recalling recent use of a hedonic personal possession would not only increase desire for it, but would increase desire to purchase a new hedonic product afterwards. Thus, instead of depleting desire, recalling recent use of a hedonic possession would stimulate subsequent desire for a hedonic product, reversing the anti-consumption intervention we have proposed. In contrast, for a utilitarian possession, we expected to find a pattern of desire depletion consistent with the first two studies, such that recalling the recent use of a utilitarian possession would increase consumption desire and decrease interest in buying a new product.

Method

A total of 408 participants (58.1% female) were recruited from AMT. The design of this study was similar to that of the first two studies, but with one addition: We not only varied the

first desire-evoking task (recently used vs. recently unused), but also varied the type of product that participants recalled in this task. Specifically, we asked half the participants to recall a possession that fulfilled a need (i.e., a utilitarian possession) and asked the other half of the (randomly assigned) participants to recall a possession used for enjoyment or pleasure (i.e., a hedonic possession). The study therefore employed a 2 (task: recently used vs. recently unused) \times 2 (possession type: utilitarian vs. hedonic) between subjects design. Participants were randomly assigned one of the four manipulation conditions.

After completing the manipulation task, participants were assigned to one of two impulsive choice tasks: utilitarian value and hedonic value. The jacket choice used in the second study was modified to emphasize either its hedonic or utilitarian characteristics. In the utilitarian value description, the functionality and ease of using and maintaining the jacket (e.g., durable material, machine washable, dries fast, wrinkle-free, good for daily wear) were emphasized. In the hedonic value description, the aesthetic gratification and pleasure from using the jacket (e.g., designed by a top designer, luxurious fabric, unique style, great for special occasions) were highlighted. All participants then indicated their desire for the jacket on a 7-point scale anchored with 1 = “no desire at all”; 7 = “very strong desire” and the probability that they would purchase the jacket using a percentage sliding scale bounded by 0% and 100%. Finally, participants completed Rook and Fisher’s (1995) impulsive buying scale and provided their demographics.

Results

Desire experienced in first task. The results replicated findings in the previous studies, demonstrating that participants who recalled recent use of a personal possession ($M_{\text{Recently_Used}} = 5.34, SE = .11$) indicated greater momentary desire for it when compared to those who

formulated a plan to use a possession that they had not used recently ($M_{\text{Recently_Unused}} = 4.56$, $SE = .11$, $F(1,365) = 25.03$, $p < .001$, $\eta^2 = .064$). This pattern was the same whether the personal possession involved was utilitarian or hedonic. Furthermore, and not surprisingly, the desire experienced was higher for participants who recalled or made a plan to use a hedonic possession ($M_{\text{hedonic_possession}} = 5.12$, $SE = .11$) than for those who recalled or planned to use a utilitarian possession ($M_{\text{utilitarian_possession}} = 4.75$, $SE = .12$, $F(1,365) = 5.16$, $p < .05$, $\eta^2 = .014$).

Desire experienced in second task. To examine effects of desire experienced on different types of target items, two separate analyses were conducted: one for the jacket emphasizing its utilitarian aspects and the second for the jacket emphasizing its hedonic aspects. Participants' desire for the jacket was submitted to a 2 (task: recently used vs. recently unused) \times 2 (possession type: utilitarian vs. hedonic) ANCOVA, with demographics and trait impulsivity score as covariates. Results showed that first, when a jacket was described by making its hedonic aspects salient, a significant interaction emerged between task and possession type ($F(1,172) = 10.56$, $p = .001$, $\eta^2 = .058$). Participants who had recalled recently using a hedonic possession ($M_{\text{Used_hedonic}} = 5.55$, $SE = .25$, 95% CI[5.07, 6.04]) indicated significantly higher desire for the jacket than those who planned to use a hedonic possession they had not used recently ($M_{\text{Unused_hedonic}} = 4.57$, $SE = .23$, 95% CI[4.11, 5.02]).

This pattern of results did not hold for those thinking about utilitarian possessions in the manipulation task. In this case, the level of experienced desire for the hedonically accentuated jacket was numerically but not statistically lower when participants recalled recent use of a utilitarian possession ($M_{\text{Used_utilitarian}} = 5.03$, $SE = .22$, 95% CI[4.61, 5.46]) than when they planned to use an unused utilitarian possession ($M_{\text{Unused_utilitarian}} = 5.48$, $SE = .19$, 95% CI[5.10, 5.86], $p = .12$).

Furthermore, when the jacket was described by making its utilitarian aspects salient in the second task, no statistically significant difference was found across four conditions, indicating that thinking about either type of possession in the first task did not have a systematic effect on desire for the utilitarian product in the second task. This pattern of results supports our hypothesis 3.

Purchase likelihood in the second task. When we conducted an ANCOVA with purchase likelihood of the jacket as the dependent variable, a consistent pattern of results was observed. When the jacket was described with its hedonic aspects made salient, the interaction term between task and possession type emerged as significant ($F(1,172) = 8.99, p = .003, \eta^2 = .050$). Participants who had recalled a hedonic possession in the first task ($M_{Used_hedonic} = 57.36, SE = 4.46, 95\% CI[48.55, 66.16]$) showed a higher purchase likelihood for the jacket than those who planned to use a hedonic possession ($M_{Unused_hedonic} = 48.90, SE = 4.18, 95\% CI[40.65, 57.15]$). In contrast, when participants recalled use of a utilitarian possession ($M_{Used_utilitarian} = 45.37, SE = 3.87, 95\% CI[37.73, 53.02]$), participants indicated lower purchase likelihood of purchasing the jacket than those who planned to use their utilitarian possession ($M_{Unused_utilitarian} = 60.85, SE = 3.47, 95\% CI[54.01, 67.69]$). This pattern of results provides further support to H3.

When the jacket was described with its utilitarian aspects made salient neither main effect of task nor interaction with possession type emerged as statistically significant suggesting that when the second product's utilitarian aspects were emphasized, its choice was not affected by prior desire evoked from owned products. These results are summarized in Figure 1.

[Insert Figure 1 about here]

Discussion

The results of study 3 showed that people who experienced higher desire by recalling use

of a hedonic possession still felt higher desire for a subsequent hedonic item when compared to those who experienced relatively lower desire through forming a plan to use a recently unused personal possession. In contrast, people who experienced higher prior desire by recalling a utilitarian owned product felt less desire for a subsequent hedonic item. Such a pattern of results did not obtain when the second task involved a utilitarian item. In this case, as would be expected, study participants were immune to the level of desire experienced in the first reflection task. The main takeaway from this pattern of findings is that as an intervention to counter over-consumption, recalling recent use of one's utilitarian personal possessions is the most appropriate way to suppress desire for shopping hedonic items.

Study 4

The objective of this final study was to obtain supporting evidence for the proposed mechanism by which recalling use of a hedonic possession affects desire for subsequent consumption. In addition to our proposed explanation that recalling the use of a hedonic possession produces positive arousing emotions, thereby reversing desire depletion, a second distinct explanation supported by consumer psychology research is that consumers have different expectations of how they will adapt to their hedonic and utilitarian possessions over time. Specifically, for hedonic possessions, they may anticipate that having used the item recently, they will feel lower desire for it in the future than they do at present (Alba & Williams, 2013). Due to lower expected desire to use the hedonic possession in the future, those recalling such an item may continue to experience higher desire for a new hedonic product. We tested both explanations in this study.

Method

229 participants (51.1% female) were recruited to participate in this study via AMT in exchange for monetary compensation. Participants were randomly assigned to one of three (possession type: hedonic vs. utilitarian vs. control) conditions. Like the previous studies, participants were asked to recall recent use of a possession, but the instructions regarding type of possession varied by condition. For those in the hedonic possession condition, participants were asked to think of a recently used possession they had “purchased for enjoyment or pleasure.” In the utilitarian possession condition, participants were asked to think of a recently used possession they had “purchased for necessity or convenience.” Participants in the control condition were instructed to think of any recently used possession without further reference.

As a manipulation check after completing the writing task, all participants indicated the extent to which the recalled possession is “hedonic (used for enjoyment and pleasure) vs. utilitarian (used for a necessity or convenience)” on a seven-point scale anchored with 1 = “completely hedonic,” and 7=“completely utilitarian.” Then they indicated their desire to use the product: (1) *at this moment*, and the level of desire they expected to feel for this product (2) *next week*, and (3) *next month*. In each case, 7-point scales anchored with 1 = “no desire at all”, 4 = “moderate desire”, and 7 = “very strong desire” were used to indicate desire.

Next, participants answered questions about their experienced momentary emotions: “How do you feel about the experience of using this product at this moment?” Based on prior research that has identified guilt, cheerfulness, and delight as emotional consequences for hedonic products and disappointment, security, and satisfaction for utilitarian products (e.g., Chitturi, Raghunathan & Mahajan, 2007; 2008), these six emotions were elicited. They also completed a four-item scale assessing their level of arousal with four bipolar items: simulated-relaxed, excited-calm, aroused-unaroused, and jittery-dull (Mehrabian & Russell, 1974). Each

bipolar item was rated on a seven-point scale. Finally, participants provided their demographic information.

Results

Manipulation Check. A t-test showed that the hedonic vs. utilitarian possession manipulation was successful ($t = -5.03, p < .001$). The mean for the hedonic condition was 3.14 ($SD = 1.97$) whereas that for the utilitarian condition was 4.79 ($SD = 1.94$). The control condition ($M = 4.43, SD = 1.98$) was not significantly different from the utilitarian condition but was significantly higher than the hedonic condition.

Level of experienced emotions. We ran a multivariate analysis of variance (MANOVA) across three possession conditions (hedonic vs. utilitarian vs. control) for the six emotions. The results from the MANOVA were significant for the three conditions (Wilk's $\lambda = .878, F = 2.29, p < .01$), and the univariate tests for the two positive hedonic emotions (cheerfulness and delight) were significant as well ($ps < .01$). When participants recalled recent use of a hedonic possession, they felt a greater intensity of cheerfulness ($M_{\text{cheerfulness_hedonic}} = 5.26, SE = .21, p < .01, 95\% \text{ CI}[4.85, 5.66]$) and delight ($M_{\text{delight_hedonic}} = 5.63, SE = .20, p < .01, 95\% \text{ CI}[5.24, 6.02]$) than when they recalled a utilitarian possession ($M_{\text{cheerfulness_utilitarian}} = 4.47, SE = .20, p < .01, 95\% \text{ CI}[4.07, 4.87]$; $M_{\text{delight_utilitarian}} = 4.43, SE = .20, p < .01, 95\% \text{ CI}[4.05, 4.82]$). Participants in the control condition were not significantly different from those in the utilitarian condition ($M_{\text{cheerfulness_control}} = 4.40, SE = .21, 95\% \text{ CI}[3.99, 4.81]$; $M_{\text{delight_control}} = 4.80, SE = .20, 95\% \text{ CI}[4.41, 5.19]$). The results show that recalling recent use of a hedonic item evokes greater degree of positive emotions such as delight and cheerfulness than recalling recent use of a utilitarian item.

Level of experienced arousal. Next, we conducted a similar analysis with arousal. A MANOVA was used to examine the difference between the hedonic and utilitarian conditions. The MANOVA results were significant for the three conditions (Wilk's $\lambda = .897$, $F = 2.87$, $p < 0.01$), and the univariate tests for all four arousal measures were significant as well ($ps < .05$). Participants in the hedonic condition felt higher arousal ($M_{\text{hedonic}} = 4.48$, $SE = .18$, 95% CI[4.13, 4.82]) than those in the utilitarian condition ($M_{\text{utilitarian}} = 3.66$, $SE = .19$, 95% CI[3.28, 4.04]) or in the control condition ($M_{\text{control}} = 3.67$, $SE = .11$, 95% CI[3.32, 4.02]). Consumers who recalled recent use of a hedonic possession tended to feel higher arousal than those who recalled using a utilitarian item.

Expectation of future desire experience. Contrary to the lowered expectation explanation, participants in all three conditions indicated expectations of higher desire to use the possession in the future. Overall, 58.5% of the participants thought that they would have higher desire to use the possession next month, while only 5.7% believed that they would feel lower desire to use the possession next month, and 35.8% did not indicate any change in desire to use the possession. When we compared changes in the level of desire to use a possession between the current week and next week, 78.3% of the participants expected that the desire to use the item would stay constant, while 8.0% believed it would be lower, and 13.7% thought it would be higher next month. This pattern of results indicates that consumers have a belief that their desire to use a product will be restored with the passage of time.

To test differences in expectation of desire experience between conditions, we ran a repeated measures ANOVA with conditions (hedonic vs. utilitarian) as the between-subjects factor and each of three time periods (current vs. next week vs. next month) as the within-subject factor. Results indicated a significant condition \times time interaction ($F(1, 140) = 6.25$, $p < .05$)

and a main effect of condition ($F(1,140) = 14.04, p < .001$). Participants in the hedonic possession condition reported significantly higher levels of current desire and expected desire next week, but the level of expected desire next month was not different between groups. These results are summarized graphically in Figure 2. These results indicate a lack of support for the alternative explanation that lowered expectations of desire in the future drive present increased desire in the second task.

[Insert Figure 2 about here]

Discussion

Our findings indicate that recalling recent use of a hedonic possession is arousing and simulates positive emotions to a greater degree, thereby raising subsequent consumption desire. The alternative explanation that the reversal is based on lowered expectations of adaptation to hedonic possessions is not borne out. After recalling recent use of a hedonic possession, participants continue to expect that they will experience greater desire for such items.

General Discussion

In this research, our main purpose was to answer the question of how to wean mainstream consumers, who are immersed in a materialistic, marketer-fueled, acquisitive culture based on constantly buying new things, away from this lifestyle, to one that is centered in savoring and deriving enjoyment from one's current possessions and using them up to the fullest extent. We argued, and through a set of four studies, we found supportive, even if preliminary, evidence that when faced with temptations offered by marketers, an effective way for consumers to shrug off these overtures and resist the urge to shop may lie in reflecting on the recent use of possessions they have. We found that the consumption desire is generated by this reflection task and subsequent desire for buying new things impulsively is lower as is consumers' interest in making

those purchases. Furthermore, when the temptations offered by marketers involve hedonic items that are designed to provide pleasure and are discretionary, the consumer is best off thinking in a structured way about recent use of their functional possessions.

Drawing upon disparate research streams including the anti-consumption literature, the strength model of self-regulation, research on the role of thinking in producing satiation, and recent work on the role of desires in behavioral self-control that has discovered parallel motivational properties of desire and self-control, we theorized that analogous to will-power, consumption desire may function as a resource. Evoking and experiencing consumption desire by thinking about a recently used personal possession may result in lower desire experience for a subsequent consumption-related decision. We note that further work is needed in fully understanding the role of desire in producing lowered subsequent purchase interest. While we ruled out one mechanism in Study 4, the role of financial budgets and mental accounts also needs further examination. Likewise, experiments to more conclusively document the mediating role of consumption desire in producing the effects of the reflection strategy are needed.

The findings detailed in this paper enable the creation of a compelling yet simple intervention method designed to tackle a serious problem that forms a core concern of anti-consumption research: the continual acquisition of new items by consumers to add to their already abundant stock of possessions. Our studies, which used an instruction-based reflection task requiring a few minutes, consistently found that when individuals recall their recent use of a personal possession, it evokes momentary consumption desire for the item after which they experience less intense desire when faced with an opportunity to shop impulsively and have lower willingness-to-pay for new products. We also discovered a useful boundary condition for this effect. When participants recalled using their hedonic possessions recently, the beneficial

effect of stifling the urge to shop was reversed. When the reflection task aroused emotions such as delight and excitement, it stimulated rather than depleted desire intensity in a subsequent shopping decision for other hedonic products. This later finding gives guidance on things to be wary of when designing a focused, effective intervention to reduce shopping.

We note that our findings are consistent with research on mindfulness practice that has offered it as an antidote to consumerism (Bahl et al. 2016; Rosenberg 2004). While training in mindfulness through meditation and an increased awareness and focus on the present is seen as promoting more thoughtful and restrained shopping choices made with consciousness, and creating a sense of fulfillment that can quell consumption desire, here we argue that a much simpler (and therefore potentially more widely applicable) method of simply thinking about all the useful functional things one already possesses and how one has recently enjoyed using them may produce many of the same dampening effects on shopping urges and reduce consumption on a “just-in-time” basis.

Our proposed method adds to the arsenal of instruments available to anti-consumption supporters by providing them with an intervention that may be easier to adopt for mainstream consumer friends and acquaintances as a “middle way” towards considering and then adopting more involved, and some would say, more difficult, anti-consumption practices such as boycotting, voluntary simplicity, dumpster diving, or intermittent fasting. Our method could also be applied effectively “just-in-time” by consumers to help themselves during incidental exposure to tempting goods while they are out and about performing every day activities. It could also be taught by high school teachers and by consumer advocates such as credit counselors and other personal finance experts in a systematic way to encourage students and consumers with financial troubles, respectively, to shop prudently. Although we did not study this directly, performing the

intervention regularly prior to, or during occasions to shop impulsively may arise, may be beneficially incorporated into one's shopping routines by consumers. (One of the authors of this paper can anecdotally attest to its efficacy from personal experience, having employed it diligently over a period of several months).

The present research offers reflection as a fourth distinct strategy to support anti-consumption, to add to the three strategies of rejection, restriction, and reclaim that anti-consumption researchers have studied extensively. There are at least two ways to think about reflection in relation to these other three more established anti-consumption approaches. One way is to think of it as a method that is appropriate for mainstream consumers who are still very much in an acquisitive lifestyle, but have recognized its pitfalls, and who appreciate the merits of anti-consumption. For such anti-consumption novices, adopting the reflection method, specifically thinking about recent use of their possessions when they encounter tempting marketing stimuli, may provide a starting point to join the anti-consumption movement, before going on to practice other methods.

A second way to think about reflection is as a method for seasoned practitioners of anti-consumption to increase the efficacy of the other three strategies. Take the case of a consumer considering brand boycott as a means of expressing his or her values (Yuksel 2013), and deciding what would be the most effective and self-identity consistent brand to boycott. Reflecting about one's current possessions that have been recently used (and also those that have been set aside) will provide useful information from personal experience to help make this decision. It will point to specific possessions that are made in unethical ways, or by companies with questionable values, and those that merit a protest. As this example illustrates, a core distinction between reflection and the other three methods is that reflection is inwardly focused

and emphasizes positive reasons for not consuming (“I already have wonderful things that I enjoy using, so I don’t need new ones”), as opposed to the other approaches that are motivated by negative reasons such as “symbolic incongruity, negative experiences, or value inadequacy” (Chatzidakis and Lee 2012). Thus, reflection complements rejection, restriction, and reclaim.

What is more, under specific circumstances or for particular people, the “reasons for” not consuming that are highlighted by a reflection exercise may interact positively with “reasons against” consumption from the other methods to strengthen the person’s anti-consumption resolve. More research is needed to consider how to integrate these four strategies effectively so as to develop a lifestyle that is centered in anti-consumption principles, yet provides maximal well-being and fulfillment to the individual by allowing them to use what they already own in the most judicious and conscious way, and to strengthen their identification with the core principles of anti-consumption.

Although our research focus and the studies described in this paper were restricted to shopping decisions, our findings raise questions about their applicability to other domains beyond shopping and anti-consumption, and to broadening the study of the role of desires in self-regulation more generally. For instance, it is quite possible that decisions such as those involving organizational or personal finance decisions will be similarly influenced by the level of corresponding desire experienced by an individual for a particular option --- for tangible outcomes in the first case, and security in the second case, and desire depletion of the sort we discovered may occur when such decisions are made consecutively. However, just like self-control research, the questions of how durable such desire depletion effects are and how transferable they are across domains remain open and merit future attention.

Conclusion

To conclude, the current work shines light on the importance of considering consumption desire explicitly when studying questions about the interplay between desire and willpower in consumers. Because most current treatments tend to focus mainly on self-control, they either ignore consumer desire entirely, or study questions where desire is seen as harmful and something to be stifled. Such a view is consistent with the core strain of anti-consumption research as well which focuses on negative reasons for spurning consumption. However, there are situations where desire stems from and contributes to positive individual and social outcomes such as desire for achievement, personal fulfillment, and social justice, and in such cases understanding how to prevent rather than promote desire depletion over sequential experiences may be more important to understand. In our view, such a perspective will allow anti-consumption principles to be accessible to a broader base of consumers.

References

- Adams, Gary A., and Barbara L. Rau (2011), "Putting Off Tomorrow to do What You Want Today: Planning for Retirement," *American Psychologist*, 66(3), 180-192.
- Adriaanse, Marieke A., Denise T. D. de Ridder, and John B. F. de Wit (2009), "Finding the Critical Cue: Implementation Intentions to Change One's Diet Work Best When Tailored to Personally Relevant Reasons for Unhealthy Eating," *Personality and Social Psychology Bulletin*, 35(1), 60-71.
- Babin, Barry J., William R. Darden, and Mitch Griffin (1994), "Work and/or Fun: Measuring Hedonic and Utilitarian Shopping Value," *Journal of Consumer Research*, 20 (4), 644-656.
- Bahl, Shalini, George R. Milne, Spencer M. Ross, David Glen Mick, Sonya A. Grier, Sunaina K. Chugani, Steven S. Chan, Stephen Gould, Yoon-Na Cho, Joshua D. Dorsey, Robert M. Schindler, Mitchel R. Murdock, and Sabine Boesen-Mariani (2016), "Mindfulness: Its Transformative Potential for Consumer, Societal, and Environmental Well-Being," *Journal of Public Policy & Marketing*, 35(2), 198-210.
- Baumeister, Roy F. (2002), "Yielding to Temptation: Self-Control Failure, Impulsive Purchasing, and Consumer Behavior," *Journal of Consumer Research*, 28(4), 670-676.
- Baumeister, Roy F., Kathleen D. Vohs, and Dianne M. Tice (2007), "The Strength Model of Self-Control," *Current Directions in Psychological Science*, 16(6), 351-355.
- Belk, Russell (2010), "Sharing," *Journal of Consumer Research*, 36(5), 715-734.
- Belk, Russell W., Güliz Ger, and Søren Askegaard (2003), "The Fire of Desire: A Multisited Inquiry into Consumer Passion," *Journal of Consumer Research*, 30(3), 326-351.
- Black, Iain R., and Helene Cherrier (2010), "Anti- Consumption As Part of Living a Sustainable Lifestyle: Daily Practices, Contextual Motivations and Subjective Values,"

- Journal of Consumer Behaviour*, 9(6), 437-453.
- Brosius, Nina, Karen V. Fernandez, and Hélène Cherrier (2013), "Reacquiring Consumer Waste: Treasure in Our Trash?" *Journal of Public Policy & Marketing*, 32(2), 286-301.
- Buhrmester, Michael, Tracy Kwang, and Samuel D. Gosling (2011), "Amazon's Mechanical Turk a New Source of Inexpensive, Yet High-Quality, Data?" *Perspectives on Psychological Science*, 6(1), 3-5.
- Burroughs, James E., Lan Nguyen Chaplin, Mario Pandelaere, Michael I. Norton, Nailya Ordabayeva, Alex Gunz, and Leslie Dinauer (2013), "Using Motivation Theory to Develop a Transformative Consumer Research Agenda for Reducing Materialism in Society," *Journal of Public Policy & Marketing*, 32(1), 18-31.
- Burton, Scot, and Jeremy Kees (2012), "Flies in the Ointment? Addressing Potential Impediments to Population-Based Health Benefits of Restaurant Menu Labeling Initiatives," *Journal of Public Policy & Marketing*, 31(2), 232-239.
- Carver, Charles S., and Michael F. Scheier (2001). *On the Self-Regulation of Behavior*. Cambridge, UK: Cambridge University Press.
- Chatzidakis, Andreas, and Michael SW Lee (2013), "Anti-Consumption As the Study of Reasons Against," *Journal of Macromarketing*, 33(3), 190-203.
- Cherrier, Hélène (2010), "Custodian Behavior: A Material Expression of Anti- Consumerism," *Consumption, Markets and Culture*, 13(3), 259-272.
- Cherrier, Hélène (2009), "Anti-Consumption Discourses and Consumer-Resistant Identities," *Journal of Business Research*, 62(2), 181-190.
- Cherrier, Hélène, and Jeff B. Murray (2007), "Reflexive Dispossession and the Self: Constructing a Processual Theory of Identity," *Consumption Markets & Culture*, 10(1), 1-

29.

- Cherrier, Hélène, and Jeff Murray (2002), "Drifting Away from Excessive Consumption: A New Social Movement Based on Identity Construction," *NA-Advances in Consumer Research*, Volume 29, eds. Susan M. Broniarczyk and Kent Nakamoto, Valdosta, GA: Association for Consumer Research, 245-247.
- Chitturi, Ravindra, Rajagopal Raghunathan, and Vijay Mahajan (2008), "Delight by Design: The Role of Hedonic Versus Utilitarian Benefits," *Journal of Marketing*, 72(3), 48-63.
- Cline, Elizabeth (2014), "Where Does Discarded Clothing Go?" *The Atlantic*, July 19,
Available online at: <http://www.theatlantic.com/business/archive/2014/07/where-does-discarded-clothing-go/374613/>
- Coombs, Clyde H., and George S. Avrunin (1977), "Single-Peaked Functions and the Theory of Preference," *Psychological Review*, 84(2), 216.
- Dhar, Ravi, and Itamar Simonson (1999), "Making Complementary Choices in Consumption Episodes: Highlighting Versus Balancing," *Journal of Marketing Research*, 36(1), 29-44.
- Dholakia, Utpal M. (2015), "Three Senses of Desire in Consumer Research", In Wilhelm Hofmann and Loran F. Nordgren (Eds.), *The Psychology of Desire*, New York: Guilford Press, 407-431.
- Dholakia, Utpal M., Mahesh Gopinath and Richard P. Bagozzi (2005), "The Role of Desires in Sequential Impulsive Choices," *Organizational Behavior and Human Decision Processes*, 98(2), 179-194.
- Dobscha, Susan (1998) , "The Lived Experience of Consumer Rebellion Against Marketing," in *NA - Advances in Consumer Research Volume 25*, eds. Joseph W. Alba & J. Wesley Hutchinson, Provo, UT: Association for Consumer Research, 91-97.

- Faber, Ronald J. and Kathleen D. Vohs (2004), "To Buy or Not to Buy?: Self-Control and Self-Regulatory Failure in Purchase Behavior," *Journal of Consumer Research*, 33(4), 537-547.
- Galak, Jeff, Joseph P. Redden, Yang Yang, and Ellie J. Kyung (2014), "How Perceptions of Temporal Distance Influence Satiation," *Journal of Experimental Social Psychology*, 52, 118-123.
- Goodman, Joseph K., Cynthia E. Cryder, and Amar Cheema (2013), "Data Collection in a Flat World: The Strengths and Weaknesses of Mechanical Turk Samples," *Journal of Behavioral Decision Making*, 26(3), 213-224.
- Gould, Stephen J. (1991), "The Self-Manipulation of My Pervasive, Perceived Vital Energy Through Product Use: An Introspective-Praxis Perspective," *Journal of Consumer Research*, 18(2), 194-207.
- Hetherington, Marion M., L. M. Pirie and S. Nabb (2002), "Stimulus Satiation: Effects of Repeated Exposure to Foods on Pleasantness and Intake," *Appetite*, 38, 19-28.
- Hoch, Stephen J., and George F. Loewenstein (1991), "Time-Inconsistent Preferences and Consumer Self-Control," *Journal of Consumer Research*, 17(4), 492-507.
- Hofmann, Wilhelm, and Lotte Van Dillen (2012), "Desire the New Hot Spot in Self-Control Research," *Current Directions in Psychological Science*, 21(5), 317-322.
- Hofmann, Wilhelm, Katherin D. Vohs, and Roy F. Baumeister (2012), "What People Desire, Feel Conflicted About, and Try to Resist in Everyday Life," *Psychological Science*, 23(6), 582-588.
- Holbrook, Morris B., and Elizabeth C. Hirschman (1982), "The Experiential Aspects of Consumption: Consumer Fantasies, Feelings, and Fun," *Journal of Consumer Research*, 9(2), 132-140.

- Huneke, Mary E. (2005), "The Face of the Un- Consumer: An Empirical Examination of the Practice of Voluntary Simplicity in the United States," *Psychology & Marketing*, 22(7), 527-550.
- Inzlicht, Michael, and Brandon J. Schmeichel (2012), "What is Ego Depletion? Toward a Mechanistic Revision of the Resource Model of Self-Control," *Perspectives on Psychological Science*, 7(5), 450-463.
- Iyer, Anand (2013), "The Economics of a Woman's Closet," Available online at: <http://blog.threadflip.com/post/56162208301/the-economics-of-a-womans-closet>
- Koenigstorfer, Joerg, Andrea Groeppel-Klein, and Friederike Kamm (2014), "Healthful Food Decision Making in Response to Traffic Light Color-Coded Nutrition Labeling," *Journal of Public Policy & Marketing*, 33(1), 65-77.
- Koran, Lorrin, Ronald Faber, Elias Aboujaoude, Michael Large, and Richard Serpe (2006), "Estimated Prevalence of Compulsive Buying Behavior in the United States," *American Journal of Psychiatry*, 163(10), 1806-1812.
- Kronrod, Ann, and Shai Danziger (2013), "'Wii Will Rock You!' The Use and Effect of Figurative Language in Consumer Reviews of Hedonic and Utilitarian Consumption," *Journal of Consumer Research*, 40(4), 726-739.
- Lee, Michael SW, and Christie Seo Youn Ahn (2016), "Anti- Consumption, Materialism, and Consumer Well-being," *Journal of Consumer Affairs*, 50(1), 8-47.
- Lee, Michael SW, Hélène Cherrier, Dominique Roux, and Bernard Cova (2011), "Anti-Consumption and Consumer Resistance: Concepts, Concerns, Conflicts, and Convergence," *European Journal of Marketing*, 45(11/12), 1680-1685.
- Lee, Michael SW, Karen V. Fernandez, and Michael R. Hyman (2009), "Anti-Consumption:

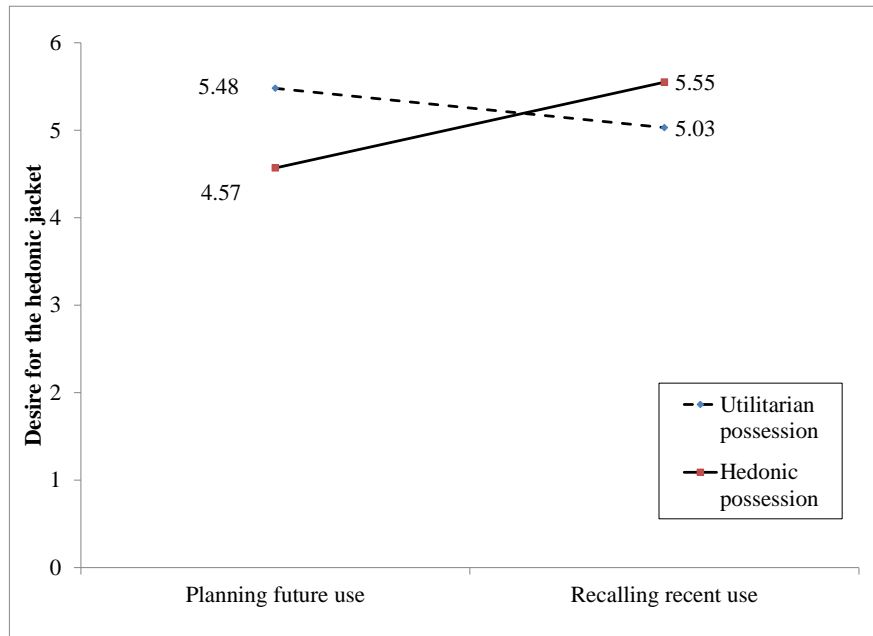
- An Overview and Research Agenda,” *Journal of Business Research*, 62(2), 145-147.
- Leonard, Annie (2011), *The Story of Stuff: The Impact of Overconsumption on the Planet, Our Communities, and Our Health – And How We Can Make It Better*, New York: Free Press.
- Liu, Peggy J., Kelly L. Haws, Cait Lamberton, Troy H. Campbell, and Gavan J. Fitzsimons (2015), “Vice-Virtue Bundles,” *Management Science*, 61(1), 204-228.
- McAlister, Leigh (1982), “A Dynamic Attribute Satiation Model of Variety-Seeking Behavior,” *Journal of Consumer Research*, 9(2), 141-150.
- Menzel, Peter and Charles C. Mann (1994), *Material World: A Global Family Portrait*. San Francisco: Sierra Club Books.
- Micheletti, Michele (2003), *Political Virtue and Shopping: Individuals, Consumerism and Collective Action*. London: Palgrave MacMillan
- Montoya, Detra Y., and Maura L. Scott (2013), “The Effect of Lifestyle-Based Depletion on Teen Consumer Behavior,” *Journal of Public Policy & Marketing*, 32(1), 82-96.
- Morewedge, Carey K., Young Eun Huh, and Joachim Vosgerau (2010), “Thought for Food: Imagined Consumption Reduces Actual Consumption,” *Science*, 330(6010), 1530-1533.
- Myrseth, Kristian Ove R., Ayelet Fishbach, and Yaacov Trope (2009), “Counteractive Self-Control When Making Temptation Available Makes Temptation Less Tempting,” *Psychological Science*, 20(2), 159-163.
- Pfaus, James G. (2009), “Reviews: Pathways of Sexual Desire,” *The Journal of Sexual Medicine*, 6(6), 1506-1533.
- Redden, Joseph P. (2008), “Reducing Satiation: The Role of Categorization Level,” *Journal of Consumer Research*, 34(5), 624-634.
- Redden, Joseph P., and Kelly L. Haws (2013), “Healthy Satiation: The Role of Decreasing

- Desire in Effective Self-Control,” *Journal of Consumer Research*, 39(5), 1100-1114.
- Richins, Marsha L. (2011), “Materialism, Transformation Expectations, and Spending: Implications for Credit Use,” *Journal of Public Policy & Marketing*, 30(2), 141-156.
- Richins, Marsha L. (2013), “When Wanting is Better than Having: Materialism, Transformation Expectations, and Product-Evoked Emotions in the Purchase Process,” *Journal of Consumer Research*, 40(1), 1-18.
- Robin, Vicki, Joe Dominguez and Monique Tilford (2008), *Your Money or Your Life: 9 Steps to Transforming Your Relationship With Money and Achieving Financial Independence*. New York: Penguin Books.
- Rook, Dennis W., and Robert J. Fisher (1995), “Normative Influences on Impulsive Buying Behavior,” *Journal of Consumer Research*, 22(3), 305-313.
- Rosenberg, Erika L. (2004), “Mindfulness and Consumerism,” In Tim Kasser & Allen D. Kanner (Eds.), *Psychology and Consumer Culture: The Struggle for a Good Life in a Materialistic World* (pp. 107-126). Washington, DC: American Psychological Association.
- Schmeichel, Brandon J., Cindy Harmon-Jones, and Eddie Harmon-Jones (2010), “Exercising Self-Control Increases Approach Motivation,” *Journal of Personality and Social Psychology*, 99(1), 162-173.
- ShopSmart (2011), “Head Over Heels: ShopSmart Poll Finds Women Own 17 Pairs of Shoes,” Available online at: <http://www.prnewswire.com/news-releases/head-over-heels-shopsmart-poll-finds-women-own-17-pairs-of-shoes-117967459.html>.
- Siemens, Jennifer Christie, and Steven W. Kopp (2011), “The Influence of Online Gambling Environments on Self-Control,” *Journal of Public Policy & Marketing*, 30(2), 279-293.
- Soll, Jack B., Ralph L. Keeney and Richard P. Larrick (2013), “Consumer Misunderstanding of

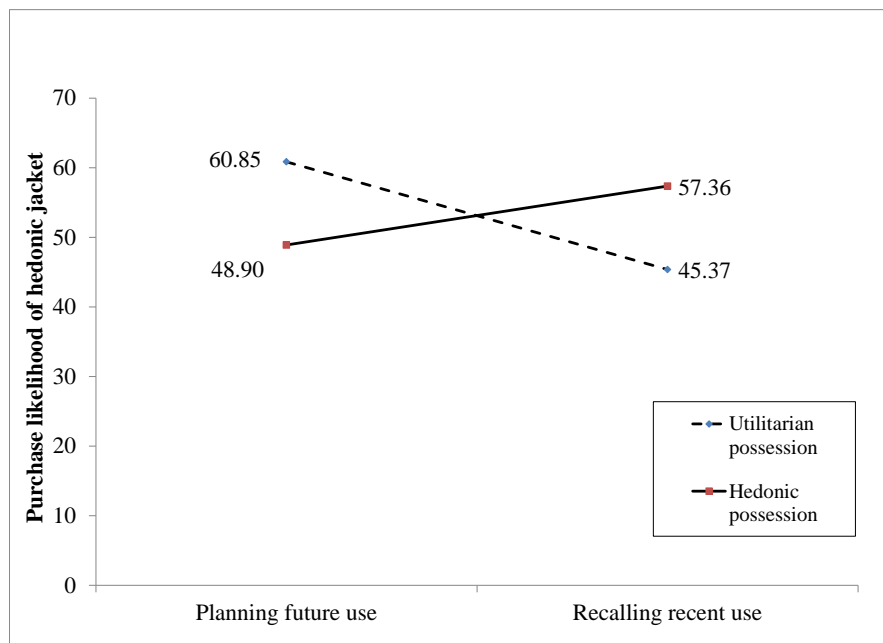
- Credit Card Use, Payments, and Debt: Causes and Solutions,” *Journal of Public Policy and Marketing*, 32(1), 66-81.
- Steketee, Gail, and Randy Frost (2003), “Compulsive Hoarding: Current Status of the Research,” *Clinical Psychology Review*, 23(7), 905-927.
- Vohs, Kathleen D., and Ronald J. Faber (2007), “Spent Resources: Self-Regulatory Resource Availability Affects Impulse Buying,” *Journal of Consumer Research*, 33(4), 537-547.
- Wadhwa, Monica, Baba Shiv, and Stephen M. Nowlis (2008), “A Bite to Whet the Reward Appetite: The Influence of Sampling on Reward-Seeking Behaviors,” *Journal of Marketing Research*, 45(4), 403-413.
- Wang, Jing, Nathan Novemsky, Ravi Dhar, and Roy F. Baumeister (2010), “Trade-offs and Depletion in Choice,” *Journal of Marketing Research*, 47(5), 910-919.
- Wansink, Brian (2004), “Environmental Factors That Increase the Food Intake and Consumption Volume of Unknowing Consumers,” *Annual Review of Nutrition*, 24, 455-479.
- Youn, Seounmi, and Ronald J. Faber (2000), “Impulse Buying: Its Relation to Personality Traits and Cues,” *Advances in Consumer Research*, 27, 179-185.
- Yuksel, Ulku (2013), “Non-participation in Anti-consumption: Consumer Reluctance to Boycott,” *Journal of Macromarketing*, 33(3), 204-216.
- Zuckerman, Marvin (1971), “Physiological Measures of Sexual Arousal in the Human,” *Psychological Bulletin*, 75(5), 297-329.

Figure 1

Interactive effect of possession type (hedonic vs. utilitarian) and task (recalling recent use vs. planning future use) on impulsive purchase intent of a hedonic product, Study 3



(A) Desire for hedonic jacket



(B) Purchase likelihood of hedonic jacket

Figure 2

Experienced and expected future desire to use a possession, Study 4

